

553,546

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
28 October 2004 (28.10.2004)

PCT

(10) International Publication Number
WO 2004/091685 A2

(51) International Patent Classification⁷: **A61L 31/10**

(21) International Application Number:
PCT/IE2004/000057

(22) International Filing Date: 16 April 2004 (16.04.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
S2003/0294 17 April 2003 (17.04.2003) IE

(71) Applicant (for all designated States except US):
MEDTRONIC VASCULAR CONNAUGHT [IE/IE]; Arthur Cox Building, Earlsfort Terrace, Dublin 2 (IE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **HANLEY, Patrick** [IE/IE]; Cloughscolita, Barna, County Galway (IE). **DOLAN, Finbar, B.** [IE/IE]; Baltrasna House, Moate, County Westmeath (IE). **HIGGINBOTHAM, Clement** [IE/IE]; 27 Priory Park, Coosan, Athlone, Conuty Westmeath (IE). **TIERNEY, Morgan** [IE/IE]; Derryneavy, Ferbane, County Offaly (IE).

(74) Agent: **MACLACHLAN & DONALDSON**; 47 Merrion Square, Dublin 2 (IE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

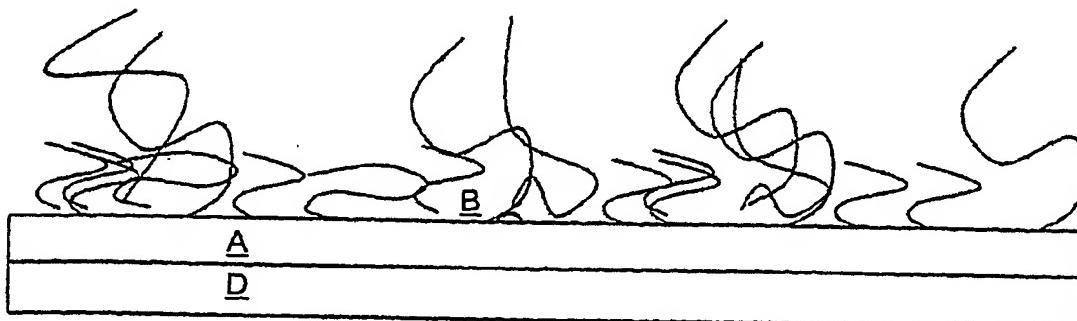
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: COATING FOR BIOMEDICAL DEVICES



WO 2004/091685 A2

(57) Abstract: A coating formulation for a substrate having abstractable hydrogen radicals is disclosed. The formulation includes a hydrophilic polymeric component comprising at least two polymeric species of differing molecular weights, an unsaturated hydrophilic monomer capable of free-radical polymerisation in the presence of a radical and a UV activatable compound capable of abstracting hydrogen radicals from the surface to be coated and from a polymeric specie of the hydrophilic polymeric component so as to initiate and promote the cross-linkage of the monomer to the surface and of the monomer or a propagating monomer chain to a polymeric specie of the polymeric component, and a suitable solvent to give the formulation a desired viscosity.